



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/660,966	09/12/2003	Francesco Braghieri	P/4074-21	6338
2352	7590	06/30/2005	EXAMINER	
OSTROLENK FABER GERB & SOFFEN 1180 AVENUE OF THE AMERICAS NEW YORK, NY 100368403				ALSOMIRI, ISAM A
ART UNIT		PAPER NUMBER		
3662				

DATE MAILED: 06/30/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>
	10/660,966	BRAGHIROLI, FRANCESCO
	<b>Examiner</b>	<b>Art Unit</b>
	Isam Alsomiri	3662

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

1) Responsive to communication(s) filed on 14 April 2005.  
 2a) This action is **FINAL**.      2b) This action is non-final.  
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

4) Claim(s) 1-16 and 18 is/are pending in the application.  
 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
 5) Claim(s) \_\_\_\_\_ is/are allowed.  
 6) Claim(s) 1-16 and 18 is/are rejected.  
 7) Claim(s) \_\_\_\_\_ is/are objected to.  
 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

9) The specification is objected to by the Examiner.  
 10) The drawing(s) filed on 12 September 2003 is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) All    b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413)
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Date. _____
3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____	5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)
	6) <input type="checkbox"/> Other: _____

## DETAILED ACTION

### *Drawings*

The drawings are objected to because figures 1 and 2 are not clear to show the claimed planes and the orientation of the sensors relative to the wheel or the rim, it is not clear from the figures where is the sensor located relative to the wheel and the claimed planes. A complete drawing showing the setup of the system is required to assist in understating the invention. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

New corrected formal drawings in compliance with 37 CFR 1.121(d) are required in this application. Applicant is advised to employ the services of a competent patent

draftsperson outside the Office, as the U.S. Patent and Trademark Office no longer prepares new drawings. The corrected drawings are required in reply to the Office action to avoid abandonment of the application. The requirement for corrected drawings will not be held in abeyance.

#### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 2, 6, 8-10 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. It is not clear what is meant by the claim limitations "in particular" throughout the claims, it is not clear whether the limitations following those words are limiting or are just examples.

#### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

**Claims 1-6, 8-16, and 18 are rejected under 35 U.S.C. 102(a) as being anticipated by anyone of Kitagawa et al. US 6,657,711; Boess et al. US 6,414,304; Bartko et al. US 5,731,870.**

Re claim 1, Kitagawa et al discloses in figures 1 and 12-14, a method of determining geometrical data of a motor vehicle wheel 1 mounted rotatably about an axis of rotation, in which a plurality of measurement points on the rotating wheel are scanned (12, 13, 79) in contactless mode, characterized in that in at least two planes perpendicular to the axis of rotation the spacings of a plurality of measurement points on a respective periphery of the corresponding part of the wheel from a reference location and the rotary angle positions of the respective measurement points are measured and that the position of the motor vehicle wheel with respect to the axis of rotation is determined from the measurement values (see Abstract); the measuring being carried out by a scanning light beam that has an unchanging direction at least during a revolution of the wheel (see Abstract, figures 1 and 12-14). Boess and Bartko both disclose similar systems for aligning a wheel by scanning a plurality of measurement points on the rotating wheel in contactless mode.

Re claim 2, Kitagawa teaches determining the position of the wheel from the measurement values (see Abstract, and figures 7A,B).

Re claim 3, Kitagawa teaches in that the measurement points are scanned on a surface of the part of the wheel, which is substantially inclined or perpendicular (see figure 1).

Re claim 4, Kitagawa teaches in that a lateral wobble (run out) and/or radial wobble (run out) on the wheel is or are ascertained from the measurement values (see figure 22, col. 13 lines 19-29).

Re claim 5, Kitagawa teaches in that the measurement points are scanned on parts of the wheel of the inside of the wheel and/or the outside of the wheel and/or at the periphery of the wheel (see figure 1).

Re claim 6, Kitagawa teaches in that the position ascertained from the measurement values are used for correction of balancing parameters which are ascertained in an unbalance measuring operation (see Abstract, ).

Re claim 11, Kitagawa discloses in figures 1 and 12-14 an apparatus for determining geometrical data of a motor vehicle wheel 1 mounted rotatably about an axis of rotation, comprising a contactless scanning device connected to a spacing measuring device which measures the spacing of a measurement point scanned on the wheel 1 from a reference location 12,13, 79; and an evaluation device 14 which evaluates the measurement values, characterized in that a rotary angle sensor for determining the respective rotary angle positions of the scanned measurement points during rotation of the wheel about the axis of rotation is connected to the evaluation device 14, and that the evaluation device 14 has a computer which from the spacings of the measurement points from the reference location 4 and the respective rotary angle positions (see figure 7a,b) of the measurement points which are on at least two peripheries on parts of the wheel (12, 13, 79), which peripheries are in planes perpendicular to the axis of rotation determines the position of the motor vehicle wheel

1 and in particular the position of the geometrical axis of the wheel with respect to the axis of rotation (see Abstract, figure 1, 7, 12-14); the measuring being carried out by a scanning light beam that has an unchanging direction at least during a revolution of the wheel (see Abstract, figures 1 and 12-14). Boess and Bartko both disclose similar systems for aligning a wheel by scanning a plurality of measurement points on the rotating wheel in contactless mode.

Re claim 12, Kitagawa discloses in figures 1 and 12-14 the scanning device and the spacing measuring device form a movable spacing measuring unit.

Re claim 13, Kitagawa discloses in figure 1 the spacing measuring unit (8<sub>1</sub>, 8<sub>2</sub>, 8<sub>3</sub>) is in the form of a triangulation measuring device.

Re claims 14-15, Kitagawa teaches measuring units are directed on the inside, outside, and peripheral surface of the wheel (displaceable parallel to the axis of rotation) (see figure 17).

Re claim 18, it's inherent that the rotary angle sensor is non-rotatably coupled to the motor vehicle wheel.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

**Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over  
Kitagawa et al. US 6,657,711 in view of Conheady et al. US Pub. No. 2002/0018218.**

Re claim 7, Kitagawa is silent about matching the rim and the tire in a second positional relationship to minimize the effects of the run out of the rim and of the unbalance of the vehicle wheel. Conheady teaches ascertaining the run out data of the rim and the unbalance data of the vehicle wheel in a first positional relationship of the tire and the rim, and by matching the rim and the tire in a second positional relationship to minimize the effects of the run out of the rim and of the unbalance of the vehicle wheel (see [0016 – 0019]). It would have been obvious to Kitagawa to matching the rim and the tire in a second positional relationship for compensation to be effected.

#### ***Allowable Subject Matter***

Claims 8-10 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

#### ***Response to Arguments***

Applicant's arguments filed April 14, 2005 have been fully considered but they are not persuasive. Applicant argues that Kitagawa does not teach "determining geometrical data of a motor vehicle wheel mounted rotatably about an axis of rotation on a main shaft of a wheel balancing machine". However, the limitation regarding the wheel being on a main shaft of a wheel balancing machine is in the preamble, and the

body of the claim does not support (breadth life to) the limitation, therefore, they are not given patentable weight. A preamble is generally not accorded any patentable weight where it merely recites the purpose of a process or the intended use of a structure, and where the body of the claim does not depend on the preamble for completeness but, instead, the process steps or structural limitations are able to stand alone. See *In re Hirao*, 535 F.2d 67, 190 USPQ 15 (CCPA 1976) and *Kropa v. Robie*, 187 F.2d 150, 152, 88 USPQ 478, 481 (CCPA 1951).

### ***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Isam Alsomiri whose telephone number is 571-272-6970. The examiner can normally be reached on Monday-Friday 8:00-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas Tarcza can be reached on 571-272-6979. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Isam Alsomiri



June 26, 2005



Thomas H. Tarcza  
THOMAS H. TARCZA  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 3600